#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

### WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029290

Address: 333 Burma Road **Date Inspected:** 14-Mar-2013

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job site

**CWI Name:** Andrew Keech **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower

### **Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Robert A. DeArmond was present at the San Francisco Oakland bay Bridge job site at Yerba Buena Island to observe and perform Non-Destructive testing for the San Francisco Oakland Bay Bridge (SFOBB) project. This Quality Assurance Inspector (QAI) observed the following work performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below:

Ultrasonic Testing Tower ESW

Weld No.: E-042 #20

Location: K

Face: "A" (Y+1500~1850)

This QAI performed Ultrasonic Testing (UT), in tandem with ABF QC inspector Mr. Andrew Keech, on Complete Joint Penetration Electroslag welds. Weld joint is designated as a 60mm 150 degree T-Joint, Weld No.: E-042 #20 location K. During the QA/QC tandem Ultrasonic Testing, scanning was performed for longitudinal planar indications; in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5. The UT inspection was performed using a 70 degree shear wave from face A; (2) planar recordable indications were discovered at locations noted below. The remaining length of weld tested with planar indications did not appear to have a rating that qualifies as rejectable or recordable according to AWS D1.5 2002 and supplemental procedure SE-UT-D1. 5-CT-108-ESW-Revision: 5.

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Planar Recordable Indication

Face A

Y+

1795 and 1815

(See Ultrasonic Testing Report for additional information)

This QAI performed documentation of existing Electroslag weld excavations throughout the interior tower welded connections. The following is a summary of current excavations:

Location: S (Y+7030~7450)

Weld No.: S-041 #09 120-degree T-Joint

Face: A (Depth: 33 mm)

Location: T (Y+3570~4000)

Weld No.: S-043 #13 80 mm to 100 mm transition

Face: A (Depth: 60 mm)

Location: G (Y+7800~8200)

Weld No.: S-045 #21 90-degree T-Joint

Face: B (Depth: 50 mm)

Location: G (Y+1900~2300)

Weld No.: S-045 #21 90-degree T-Joint

Face: A (Depth: 50 mm)

Location: F (Y+6860~7240)

Weld No.: E-045 #24 90-degree T-Joint

Face: A (Depth: 40 mm)

Location: F (Y+7240~7600)

Weld No.: E-045 #24 90-degree T-Joint

Face: A (Depth: 13 mm)

Location: K (Y+3400~4100)

Weld No.: E-042 #20 150-degree T-Joint

Face: B (Depth: 5 to 10 mm)

Location: K (Y+4350~5450)

Weld No.: E-042 #20 150-degree T-Joint

Face: B (Depth: 5 mm)

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# WELDING INSPECTION REPORT

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### **Summary of Conversations:**

As mentioned above between QA and QC concerning this project

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	DeArmond,Robert	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer